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NEW PHASES OF CANCER RESEARCH

HERMAN C. PITTS, M.D.

President of the American Society for the Control of Cancer

"When in any nation, the number of those who receive becomes greater than the number of those who give, then is the very existence of that state in danger!" So wrote a famous Roman jurist in the time of the Caesars. The final disintegration and fall of Rome justified his words. Bread and Circuses! The support of the many by the State. The use of State funds collected from the few to support the idle and the lazy that in those days constituted the many, went on for years before the final catastrophe. But that final catastrophe was certain. The contagion of selfishness is as great as that of the measles. The will to stand on one's own feet, the will to be independent is alas, too quickly lost in the scramble to receive just as much as one's neighbor.

The student tells us that history repeats itself over and over again. History is something we study but apparently never learn from. Civilizations rise and civilizations decay and the decay is invariably found in the refusal of individuals to remain independent by creating social security for themselves personally. Carried a little further, social security in units of one as expressed by each family and since the State is nothing more than a great agglomeration of such units united for the sake of mutual protection and human contacts, the social security practiced by each unit, means social security for the whole nation without the elaborate machinery set up by the State to secure such an ideal.

Certainly in the early days of our own country such a system prevailed. Each family or each community took care of its own sick and poor and generally unfortunate. Thrift made them put something aside against that rainy day that is bound to come sooner or later if enough years are added to one's life span. One wonders sometimes if science hasn't played tricks on the human race; if it hasn't rather added to the difficulties by increasing the expectancy of life to 63½ years!

Of course all such harping back to what has been, will bring a howl of protest from those progressives who maintain that conditions have changed so materially with our industrial development that what was perhaps right and proper in the old days no longer pertains. And in a measure that is perfectly true. The mass of population is much more at the mercy of trade fluctuations that are no longer local but affect the whole world. That we are more humane, more moved by the sufferings of others we can grant. That we should point with pride to definite progress away from the brute beast is more doubtful. For how reconcile such supposed progress with the present most unprovoked, most brutal war that was ever fought. Human nature has not changed very much since the days of ancient Greece and Rome. The thin veneer of what we are pleased to call "civilization" is so easily lost at the first contact with harsh reality that after all the words of that old Roman jurist carry as much force today as they did when they were uttered hundreds of years ago. They are so true they will bear repeating again and again in the hope, very likely a vain hope, that their solemn warning may help stem the rising tide of paternalism in Government that will in the end produce conditions parallel to those in Ancient Rome, where the leader of the moment who promised more bread and larger circuses carried the unthinking mob with him to the ultimate destruction of themselves and their country!

They tell us that greater dependence on Government is a world movement that is part of human

evolution. That we are playing the part of little Canutes if we oppose the rising tide! All this is possibly true. Even the lessons of history may better be ignored. On the other hand certain factors have undoubtedly come in to accelerate the tendency and make the demand more imperative. Here possibly progress in science may modify these tendencies or perhaps even prevent the establishment of conditions that history shows are subversive to stable government.

Think for a moment that not many years ago very few men or women lived beyond their productive period of life. The old and those suffering from chronic disease just didn't exist in any great number. Now science by eliminating the contagious and infectious diseases, by conquering plagues, has increased the span of life to such a great extent that we have with us a vast population of men and women over fifty—a population that is subject to the many disabling diseases of senescence that are slow in killing, but on the other hand make demands on the well for a tremendous expenditure of money and time for their care. It is to meet this demand on the purses and time of people who have little of either to give, that Government has been called in to help. So you see that science by increasing our life span is responsible in large measure for increasing paternalism and that it is also to science that we must look for at least a partial solution. For if science can discover the cause and so the cure or prevention of these many diseases of senescence then the thousands who are now a charge on someone for their care, can be kept at useful and gainful occupation for a longer time.

It is rather a large order and perhaps science is unequal to the task. The solution is, however, so important that it may be of interest to review what science is doing to combat one of the diseases that often attacks human beings at the time of greatest usefulness, when they can ill afford for both economic and social reasons to become charges on others. Let us consider cancer.

Here we have a disease that kills in the neighborhood of 158,000 persons annually in the United States. If we multiply this figure by three we can say there are roughly 474,000 cases of cancer in the country at all times. This is a large figure, an imposing figure whose elimination as a possible source of disability and consequent public care would aid considerably in reducing the number of those who receive.

Let us see what the latest lines of research are, first in searching for the cause, second in improving present lines of attack, and third in finding new methods of treatment.

Cancer research is by no means new of course. Ever since the dawn of history men have hunted for the cause and have advanced countless theories to explain its existence. With the coming of the microscope they thought surely "now we can see what it is"! But alas with all the aids that developing science brought, the final discovery was no nearer. A tremendous step in advance was made in 1914 when two Japanese, Yamagiwa and Ichikawa showed that cancer of the skin could be produced in rabbits by painting their ears with coal tar. The Japanese and all things Japanese are anathema to us just now and rightly so; but we must give those two credit for making practical use of a suggestion made nearly 140 years previously and lost like so many brilliant suggestions in dusty archives. In 1775 Percival Pott gave an excellent description of chimney sweeps cancer under the name "Cancer Scroti" and cited soot (coal tar) as the cause. It does seem incredible that Western scientists should have let the upstart Japanese point the way to an avenue of research of the greatest importance. In 1924 Kenneway and Cook in England separated one of the fractions in coal tar that proved to be an active agent and since then they and others have by separation or by synthesis developed a great number of cancerigenic agents—agents that cause cancer in an animal when applied to the skin or when injected into its tissues.

The most active of all these cancerigenic agents is methyl-cholanthrene, which Cook produced by the dehydration of bile acids. Furthermore it has been found that there is a very great similarity in structure between the sex hormones and some of the cancerigenic agents produced from coal tar. The similarity of sex hormones to the cancerigenic agents was further emphasized when Lacassagne in Paris proved that cancer of the breast in mice could be produced by long continued injection of large doses of estrin. His results have been verified many times. Dr. W. U. Gardner and his co-

workers in the laboratories of Yale University Medical School have shown by great numbers of microscopic sections taken at various intervals during the administration of estrin, the primary stimulation of breast tissue with hypertrophy, then the gradual inflammatory change and finally the development of true cancer.

It is very seldom certain that findings in animal experimentation will apply equally to man. Nevertheless the results here may very well make us pause in our rather indiscriminate use of estrogens in large doses and over long periods of time.

The similarity of various cancerigenic agents to bile acids and sex hormones opens another most interesting line of research. Isn't it quite possible that through some slight fault in normal metabolism these perfectly normal compounds are changed to produce the harmful cancerigenic agents and that these circulating in the blood find lodgment in an area of chronic inflammation and so produce malignant growths? You may be sure that many laboratories are tackling the problem from this angle—so far without result.

Another tremendously interesting field is being cultivated at the Jackson Memorial Laboratory in Bar Harbor, Maine. There Bittner, Little and coworkers have shown that there is a controlling factor for or against tumor formation transmitted through the mother's milk. This they call the "milk factor". By inbreeding through many generations, the laboratories in this country have developed several genetically pure strains of mice. Among breeding females of one strain cancers of the breast will occur spontaneously in over 90%, while in another strain it is practically never seen. The amazing thing is that if the young from the cancer susceptible strain are foster-nursed by mothers of the resistant strain, they acquire an immunity and develop very few if any tumors and their offspring in turn show a marked lessening of tumor formation. The reverse is also true to a somewhat less degree, viz — that young from cancer resistant mothers if nursed by cancer susceptible females show a definite increase in tumor development.

There is a great temptation of course to apply this finding immediately to human beings. But until something more definite is known of just what this "milk factor" is, it would be far-fetched and useless to tell a woman whose mother had cancer of the breast that she should not nurse her female offspring!

Enough has been said to show that new lines of attack in the search for the cause of cancer are being developed constantly. It would be tiresome and much beyond the scope of this paper to elaborate this theme to any greater extent. So let us pass on to the second of our sub-headings or the improvements that have taken place in already established lines of attack. Here again the field is large and waiting cultivation!

Surgery, X-ray and Radium still remain our sole reliance. Refinements in surgical technique and a gradual enlargement of the field of surgical approach go on constantly: as for instance, see the tremendous strides lung surgery has made in these very few years. But the general principles of wide excision of the growth along with removal of neighboring lymph nodes pertain today just as in the days of Halstead and others. There is a definite revival of Lawson Tait's resort to castration in cancer of the breast in females. This is so easily done at the present time by X-ray, that many think it worth while. Now doubt is being cast on the effectiveness of X-ray castration. The claim is made that an essential part of the ovary is not destroyed by X-ray and that castration must be by actual surgical removal. At the Memorial Hospital in New York, experiments are under way to prove or disprove this contention.

For some years now radiologists and clinicians as well, have held the idea that some substance might be found that injected into the blood stream, or even into the tumor itself, would greatly enhance the action of X-ray or radium. Failla at Memorial Hospital suggested distilled water as a possible agent. Since the first action of X-ray is to cause a swelling of the cell, he felt that if this could be accomplished by the injection of water before exposure to X-ray or radium the effect from those agents would be greatly increased. Unfortunately no satisfactory method of injecting the cells with water has been found so far. Just the same it is perfectly possible that some chemical may be found with a particular affinity for cancer tissue. It may not be deleterious to cancer cells itself, but it plus X-ray or radium may be effective in completely

destroying the tumor tissue. At the Rhode Island Hospital we have tried many metals with this end in view, so far without result.

There is doubt in the minds of many whether the super voltage X-ray is any more effective in treating cancer than the 200 to 400 kilo-volt machine. We have quite a number of million volt machines in operation in the United States already. Now Dr. Kerst at the General Electric Laboratories is working on what he calls an "electron accelerator". With this he hopes to develop X-rays of one hundred million volt energy. If this can be developed, and the beam of energy successfully controlled it will certainly take the place of present day X-ray in the treatment of deep seated growths. All this is for the future, however, because much experimentation must be done before it can be applied to human beings safely.

The development of the cyclotron has opened up a new avenue for the introduction of radio-active substances directly into the human body.

By bombarding red phosphorus with deuterons in the cyclotron, an isotope of phosphorus is formed which has radio-active properties, with a half decay life of about 14 days. This radio-active phosphorus can be converted into di-sodium acid phosphate which still retains its radio-activity.

Lawrence of California has found that this given orally or parenterally, has a marked effect in alleviating the symptoms of, or perhaps in even curing leukemia. The white count drops and the size of the spleen is markedly reduced without creating any untoward symptoms in the patient. Of course this new application of radio-activity presents fascinating possibilities and has been seized upon immediately for experimentation. Kenney, Craver, and Marinelli working at Memorial Hospital in New York have carried on extensive studies on the absorption of radio-active phosphorous by various types of tumors and by normal tissues. The results show that cancer of the breast for instance absorbs no greater amount than muscle or skin or any other normal tissue studied, while osteo-genic sarcoma and the enlarged glands of lympho-sarcoma show a greatly increased absorption.

So here we have a perfectly new and apparently safe method of radiation of the whole body with a small but definite concentration of the radio-active substance in tumors of certain types. The results in osteo-genic sarcoma, leukemia and lympho-sarcoma are certainly encouraging enough to warrant trying for a maximum effect in these otherwise hopeless diseases.

Under our third sub-heading, or the finding of new mehods of treatment, two lines of attack are suggested that offer amazing possibilities.

The first comes as the result of experiments with butter yellow (dimethylaminoazobenzene) in rats. Here we must perforce refer again to Japanese scientists, for in 1935 Sasaki and Yoshida reported the production of liver cancer in rats by feeding this substance to animals kept on a deficient diet. Later on it was found by other Japanese research workers that rats fed butter yellow did not develop cancer if rice bran, yeast or liver extract were added to the diet. These findings have been verified by C. P. Rhoads, Kanematsu Sugiura and many others working in this country. So here we have experiments that show very definitely that cancer in rats at least can be the result of a cancerigenic agent plus a diet deficient in essential vitamins. A great many workers in cancer have for a long while held the belief that cancer is a deficiency disease. It isn't beyond the realm of possibility that further research along these lines will prove that to be the case.

The second of the two new methods of approach to the treatment of cancer was probably suggested by the amazing results obtained from the use of drugs of the sulfa group. About three years ago, Moses Crossley, a Brown graduate and now chief chemist for the Calco Chemical Co., suggested to our Research Department at the Rhode Island Hospital that he produce a series of new compounds somewhat related to the sulfa group and that then the Department try them out experimentally on animals. Unfortunately the equipment in the Hospital laboratory was not sufficient to carry on such work satisfactorily and the offer had to be declined. Apparently the same thought, viz: — that some compound might be developed that is cyto-static just as the sulfa group is bacterio-static, occurred also to C. P. Rhoads at the Memorial Hospital in New York. So these two are now working together. Some 60 compounds have been studied

so far. Dr. Rhoads himself acknowledges that the whole search is a rather hit or miss affair. The actual application of this "hit or miss" program, however, calls for most accurate and most difficult laboratory technique. The whole study is based on the metabolic rate of tissues removed after the ingestion of varying amounts of the different drugs. Since metabolism stops in about five hours after tissues are removed from a body, the stage must be set and all work done promptly or that particular experiment is worthless. Tumor bearing animals of course are used. The metabolic rate of normal tissues subjected to the drug must be known as well as the rate for the tumor present. Because of course it is quite possible a particular drug might act on the liver, or kidney or some other organ to such an extent that it would be of no practical use no matter what its action on the tumor.

A lowering of the metabolic rate as compared with the normal for any particular tissue is assumed to be, and undoubtedly is, a measure of the extent of damage being done by the drug ingested. If in the course of these experiments a drug is found with particular affinity say for cancer of the breast, then by a proper adjustment of dosage the tumor may either be completely destroyed or at least have its growth rate greatly reduced.

Of course a major difficulty can be pointed out immediately. For it may be necessary to hunt for a different drug for every different type of tumor. This would entail almost endless research. But if even a little help is given in dealing with the cancer problem, the time and labor are well spent.

So far the work has had this much encouragement. One of the drugs tested has had a very definite action on breast cancer. Whether this action can be increased sufficiently to kill the tumor remains to be seen. Possibly the addition of X-ray might cause the already damaged growth to regress entirely. Enough has been said to show that science is reaching out in all directions for ways and means to combat the menace of cancer.

Although much was said in the early part of this discussion of cancer's economic aspects, it must not be assumed that science is coldly interested in that alone. The relief of human suffering is still its main objective and the search for that happy relief will go on and on while kingdoms rise and kingdoms fall!

68 Brown Street

AN EXPERIMENT IN SICKNESS INSURANCE

JOHN E. FARRELL

EXECUTIVE SECRETARY, PROVIDENCE MEDICAL ASSOCIATION

SICKNESS. An individual shall be deemed to be sick in any week in which, because of his physical or mental condition, he is unable to perform any services for wages.

With this definition as its basis the new Rhode Island Cash Sickness Compensation Act will inaugurate, in 1943, the first compulsory sickness insurance plan to be attempted by any state in the country. Actually the program is in partial operation at the present time, for payroll deductions are being made of employee wages, effective as of last June first, and a sizable fund is in the process of accumulation to provide the reserve bank from which benefits will be paid to Rhode Island workers who are unemployed because of sickness after April 1, 1943.

In view of the nationwide interest in this legislation, an interest that has given rise to much speculation as to the possibility of the adoption of similar plans in other states, and also to the possibility that it may be the first step in the long-discussed question of state and federal compulsory health insurance programs, a brief explanation of the history of the legislation seems in order.

Five states in the country require employee contributions to their unemployment compensation funds, and of these states Rhode Island has the highest tax on the employee. In all other states the employer carries the entire burden of the tax. Thus we find that populous, industrial Rhode Island, as the result of the 3% unemployment compensation tax divided equally by the employer and the employee and assessed on the annual wage scale of employees, has amassed a reserve fund of approximately twenty-eight million dollars—a sum more than sufficient for immediate needs, and certainly ample to meet future demands, even excessive ones.

But before agitation could be created by the employee to demand, or even request the elimination of his share of the tax in view of the reserve accumulated, a movement instigated by the Unemploy-

ment Compensation Board to divert part of the employee tax to create a cash sickness compensation fund (reportedly with the endorsement of labor leaders) gained the active support and counsel of the Social Security Board. These groups prepared the legislation, moved it through the General Assembly without any difficulty, and saw it enacted as law on April 29, 1942. Significant in the entire procedure was the failure to consult at any time the medical profession upon whom it is now apparent the burden for much of the future success of the plan will devolve. Nor has it ever been made too clear why the entire sickness tax is deducted from the employee contributions, and not equally shared by the employer, for the new law draws all its revenue by taking 1% of the 1½% tax imposed on the worker.

As it is to be operated the new law is similar to the present unemployment compensation law of the state, being administered by the unemployment compensation board and paying benefits corresponding to those already given the jobless worker who is well and available for work. The amount of the benefit depends on the total benefit credits amassed during the base period and on the highest quarterly wages of the worker, and the rates range from $7.50 to $18 a week. There is a one week required waiting period after absence from the job because of sickness before benefit payments begin, and this ruling will be amended at the next Assembly session to provide that the one week waiting period in the sickness act shall be required before each period of illness.

From a medical viewpoint the new law offers many vexing problems. In the first instance the definition of sickness is very broad, and in spite of the fact that the Board administering the act has the right to make regulations there is certain to be difficulty in limiting the certification of illness to that of doctors of medicine, since the statutes recognize the right of other groups to practice the healing art in the state. And therein lies the possibility of many questionable claims, and certainly a loss of invaluable scientific data because of conflicting diagnoses, which would be of great value in a study of future programs of health care in the state.

Then again, the Compensation Board anticipates that the certification shall be done by the individual physician. This plan is fraught with dangers and certainly cannot work easily to the best advantage of all parties concerned. It places the physician under an obligation to judge the right of the patient to a claim for benefits when he is more concerned with the health care of the individual. Then, too, the physician might be called to attend the patient during the first or waiting week, and might not have cause to make a return visit, yet he would be expected to certify an extended length of illness at a risk of his losing a patient, or patients, on the one hand, and at a risk of personal reputation for integrity on the other.

Or again, one physician might attend the claimant the first week, and another physician the following week, with a possible conflict in diagnosis resulting, in some instances due to complications arising in the development of the illness; yet the certification must rest with the physicians, and they must determine that the patient was unable to perform ANY services for wages.

Perhaps the solution of this certification problem may rest in the recommendation of the Reference Committee of the American Medical Association which, in reporting to the House of Delegates at the special meeting in 1938, on the National Health Program, endorsed the principle of compensation of loss of wages during sickness, but with the reservation that "in the interest of good medical care the attending physician should be relieved of the duty of certification of illness and recovery, which function should be performed by a qualified medical employee of the disbursing agency."

Although the opinion has been widely expressed that the new legislation is a "health insurance act", the Unemployment Compensation Board has been specific in stating that the law "is not, and was not intended to be, a health program." Although it furthers an objective which has been expressed in various proposals for nationwide health insurance under the social security act, the Rhode Island law protects only those under the state unemployment compensation law, while federal proposals would have a broader coverage in terms of workers and types of benefits.

It is true, a phase of health conservation, at least a form of health education, is possible under the sickness act with the requirement that a physician

must certify the sickness claim. Such a requirement should undoubtedly send many patients to the doctor at an earlier hour if for no other reason than to protect their benefit claim, and thereby a certain valuable amount of preventive as well as curative service may be rendered, dependent upon the persons authorized to certify the illness.

The question has been repeatedly posed as to whether the act is a "home rule" plan or whether it has federal implications. Prior to enactment the law was reviewed by members of the staff of the federal Social Security Board and comments and suggestions were solicited and received from them. From this alliance have come one or two phases of the act which may have future bearing on its local operation, as well as upon similar plans elsewhere.

For one thing, the plan calls for utilization of the present public employment offices throughout the state as the offices also for the administrative personnel of the cash sickness compensation fund, and such offices are now supported in part by federal funds. The withdrawal of these facilities would increase the administrative costs of the sickness plan, as it would entail the expense of increased personnel, equipment, and a great loss of personal statistics and data already compiled by the state unemployment compensation authorities.

This situation is more critical when one realizes that the present sickness act provides that only 1% of the contributions of any one year may be appropriated for administrative expenses, and this allocation is insufficient to permit the program to operate independently. Just why the appropriation has been set at such a low figure in view of the long experience in the cost of administering the unemployment compensation law is a matter that invites discussion.

Rhode Island and other states with sound financial reserves may find it possible to administer sickness insurance successfully. Since success in the plan will invite imitation elsewhere, it is apparent that the federal authorities eventually anticipate taking an active part in the administrative control of such programs, for there is included in the Rhode Island law the following provision:

"Sec. 15. Administrative Funds.

To the extent that funds are made available by the Federal Government, under title III of the social security act as amended or otherwise for such purpose, the expenses of administering this act shall be paid from such funds provided that this section shall not be considered to permit any expenditure of funds from the unemployment compensation administration account contrary to the provisions of sub-section (16) of section 11 of the unemployment compensation law, and provided further, however, that in the event that the social security act is amended to permit funds granted under title III thereof to be used to pay expenses of administering a sickness compensation act, such as this act, then from and after the effective date of such amendment the expense of administering this act shall be paid out of said unemployment compensation administration account or any other account or fund in which funds granted under said title III shall be deposited . . . . . ."

Whatever the outcome of the present experiment it is evident that Rhode Island has a tremendous responsibility to prove that its sickness insurance plan may be carried forward successfully under local control and with local finances. Chairman Altmeyer of the Social Security Board sounded the warning when he said that "the principle that social security should grow from experience should be the one stable and permanent guiding philosophy behind the social security program. And it must be founded upon the bedrock of sound finance and skilled professional administration. It must grow, not haphazardly as new prophets emerge with new panaceas, but systematically out of its own well-studied experience. For it is obvious that no system which is not itself stable and proven can ever bring dependable security to the American family."

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VOLUNTEER WORKERS IN HOSPITALS

On another page of the JOURNAL appears an article by Miss Bess H. Medary showing how volunteers serve the Rhode Island Hospital. Of course this is not an activity peculiar to this institution but a report from this large hospital may serve to indicate the type of service being given by patriotic women throughout the state.

In hospitals as elsewhere skilled work is mixed with drudgery so that it is difficult to keep them strictly separate but this separation has been achieved more and more. It is some years since trained nurses have done much sweeping of floors. But they have been forced to spend a large part of their valuable time entering notes on charts, answering telephone calls, folding gauze, etc. Now most of these things can't be reliably done by untrained people but neither do they require three years of intensive training. Highly intelligent women, who fill the ranks of the volunteer workers, quickly learn to do these things not only well but speedily and allow a skeleton crew of nurses to accomplish what only they are competent to do. And it is this type of woman who soon achieves the equanimity so essential if one is to be a cog in the hospital machine.

The volunteer work done by Gray Ladies and Nurses Aids is even more general than the types of service just mentioned. Under the American Red Cross the Gray Ladies have been helping in the hospitals for a number of years, supplementing in many ways the care given to patients by the busy nurses. Since the outbreak of the war it has been evident that volunteers with hospital training could help relieve the present serious shortage of nurses. The Volunteer Nurses Aides have been the answer. They are trained, usually in hospitals approved by the American College of Surgeons, in order that they may perform adequately many services ordinarily done by nurses. Last August the Office of Civilian Defense reported that throughout the country 19000 women had satisfactorily completed the Nurses Aid course and that the results in quality of service have been satisfactory to both the hospitals and the Red Cross chapters conducting this project.

In the last war the British used many such helpers calling them the Volunteer Aid Department and having them even in the hospitals with the Expeditionary Forces.

Daily the need of such voluntary help becomes more apparent and the opportunities for useful work become more extended.

PROCUREMENT AND ASSIGNMENT

The Rhode Island Procurement and Assignment Committee for Doctors, Dentists, and Veterinarians has now functioned for nine months, long enough to warrant comment on its activities and possible accomplishments.

So far, as we understand it, its work has been, for the most part, evaluation of the availability or non-availability for military service of the doctors of Rhode Island.

The work of this Committee has been hard and

has involved intimate approach to a considerable group of the medical men—many personal problems have been solved; for the most part satisfactorily to the individual concerned. Whereas, no doubt, criticism of the Committee's action has at times been outspoken and again "behind the scenes," we believe the profession of the State has recognized the fact that the Committee has performed a somewhat thankless job without fear or favor and always striven fairly to play the game.

It is a satisfactory and somewhat singular fact that the P and A Committee, with absolutely no authority to say that this or that doctor should go into military service or stay at home, nevertheless has been able to exact much influence in such decisions. An undiscussed, unagreed upon, and somewhat vague "gentlemen's agreement," between the State P and A Committee and Washington, State Selective Headquarters, Local Boards, has led invariably to these latter bodies satisfying decisions of the State Committee; for all concerned, such cooperation has simplified and furthered the end in view.

On October 15 the Medical Officers Recruiting Board located at the Medical Library was closed, as the result of the State attaining its quota of medical personnel for 1942 for the armed forces. Since the Board opened here on May 18 it has recruited and commissioned 56 doctors of medicine and 20 dentists. These enlistments, plus the men previously enrolled in the Services, and the doctors commissioned in the Navy, and those assigned with the 48th Evacuation Hospital Unit, more than oversubscribed the quota required for this year, about 240.

At present, we understand the Committee is engaged in surveying the medical needs of the State, in areas where military concentrations, or increase of populations and industries have reduced the local medical personnel below safe limits. This duty is placed upon the Committee by Washington and is undertaken in cooperation with the State Medical Society, County Societies and Health Officers (where such needs may arise) and a Division of the State Board of Health. It is believed plans may be made to dislocate doctors who for patriotic or other reasons are willing and able to move, from their present to new positions, for the period, at least, of the war emergency.

A further call for doctors to enter military service, may soon be expected. When this comes the P and A Committee will again resurvey and reclassify the Rhode Island medical personnel.

It is interesting and pleasant to know that persons in authority are trying to determine how many physicians can safely be drawn from civilian practice. On this day of writing there is a news dispatch from Washington that five doctors from the P and A met with Gen. James Magee of the Army, Ross T. McIntire of the Navy and Thomas Parran of the Public Health Service and several other officials to discuss this. The habitual wastage of war is nowhere better exemplified than in the enforced idleness of thousands of physicians in the service while their patients are receiving hurried and infrequent calls from their overworked confreres left behind. But we must remember that in war we must be ready for the peak load.

This plan of P and A Committees, in all the States, conceived by the A. M. A., in conjunction with the medical departments of Army, Navy and Public Health, would seem to have been sound in its main purpose, namely, to allocate for military service those doctors throughout the Country, who should be so allocated and to keep those at home who should stay there.

The Rhode Island State Committee on Procurement and Assignment, headed by Dr. Halsey DeWolf are doing a rather thankless but highly important job with tact, discrimination and tremendous energy and we feel that their efforts have been crowned with success.

CONFERENCE OF STATE MEDICAL SOCIETY SECRETARIES

The Board of Trustees of the American Medical Association has cancelled the annual session of the Association scheduled to be held in San Francisco in 1943. An official announcement to that effect appeared in the Journal of the American Medical Association. This was decided by the Board of Trustees after securing the best available official information and after thorough consideration of the many factors involved.

The cancellation was made in order to keep at their practice the small force of physicians that will then be left to the civilian population. This is the first time since the Civil War that the A. M. A. has postponed an annual session.

In place of the annual meeting the A. M. A. House of Delegates, Board of Trustees, scientific councils and officers will meet in Chicago next June to deal with the necessary business of the Association and the war time problems of the medical profession.

In the meantime the Annual Conference of Secretaries of Constituent State Medical Associations is being held at the Association's offices in Chicago on Nov. 20 and 21 for the purpose of discussing existing problems and those that may develop as the result of the intensification of the war program. It is the desire of the Board of Trustees and of other officers of the American Medical Association that the program pertain to matters of important common interest and it is hoped that the papers and discussions presented before the Conference can be made as helpful as possible to secretaries, editors and other officials of the constituent state medical associations.

It was urged that every state medical association be represented at the Conference by its secretary and by the editor of its journal. From Rhode Island the secretary, Dr. Buffum and the editor, accompanied by Mr. Farrell, Executive secretary of the Providence Medical Association are attending.

RECOGNITION

Undoubtedly most of us have read the comment in the October 31st number of the Journal of the American Medical Association on "Health News Broadcasts by Providence Medical Association". It is an interestingly written and flattering sketch of the series of brilliant radio talks by the versatile and indefatigable executive secretary, Mr. John E. Farrell.

His work as Executive Secretary of the Providence Medical Association has attracted notice throughout the country and we congratulate him on this added recognition of his enthusiasm and ability.

VOLUNTEERS SERVE THE RHODE ISLAND HOSPITAL

Two factors were responsible for the organization of the Volunteer Department at the Rhode Island Hospital, namely; the employment situation and the influx of scores of willing volunteers, many of whom had had expert training and experience. To interview, select, place, and use this group efficiently and to show department heads where and how they could use volunteers successfully was a man sized job.

June 1, 1942 adequate quarters, office space, lounging rooms, and rest rooms were equipped and opened, and a part-time paid executive, who herself had been a volunteer and was familiar with the hospital, was employed to set the wheels in motion. In order to tie this new venture into the hospital program and to integrate the program into the community, this Department was placed under the leadership of the Director of Social Service. The Nurses Aides and Gray Ladies recruited under the American Red Cross but representing two volunteer groups requiring specialized training in the nursing field, were already working efficiently. It was decided to leave these volunteers (35 Nurses Aides and 70 Gray Ladies) under the direction of the Superintendent of Nurses.

The first week in June, 39 volunteers other than Nurses Aides and Gray Ladies worked 322 hours. Six weeks later, 80 volunteers were giving 700 hours of service a week. Through the following weeks this high average has been maintained. Figured roughly, this group is taking the place of approximately 18 paid workers.

Heads of departments, after surveying their programs, are eager for efficient volunteer service. They are asked to keep the Volunteer Director aware of the amount and kind of work they need to have done, and to suggest the type of volunteer desired in their department.

Who are these volunteers and from where do they come? On the whole they are the busiest women in Providence, yet, they always find time to help when a need presents itself. Many are members of the Corporation, some are doctors' wives, some are secretaries who come to the hos-

pital after a full days work elsewhere. Some have heard of the opportunity of service and have applied directly, others have been sent through the Volunteer Bureau under the Council of Civilian Defense and some have come through the American Red Cross. The youngest volunteers are 15 and 16 year old girls who are assigned to the Dietary Department to peel fruit, butter bread, fill sugar bags and make sandwiches. The oldest volunteer is a 72 year old man, a retired expert accountant, who puts his experience to good use in the Credit Department. From the Sewing Room women who work alone or in groups take towels, draw sheets, and stand covers, out to be hemmed. In the Cafeteria canteen workers from the American Red Cross serve meals. In the Central Supply Room, 22 women clean hypodermic needles, put up supplies, wash rubber gloves, and keep the shelves of this vital corner of the hospital well equipped for any emergency. Formerly all this detail was taken care of by over-worked nurses and now skilful volunteers are assisting with these supplies. On the wards and in the operating room nurses are relieved of routine details and telephone calls by Ward Secretaries who report at their assigned desks as promptly and as regularly as the paid workers. In Social Service, the Nursing Training School Office, and the Record Room, we find experienced clerical workers, filing and typing. We also find Receptionists meeting and guiding patients, and in the Laboratory experienced technicians are assisting with the routine examinations. All these services in one way or another are relieving nurses, dietitians, social workers, and technicians for other urgent duties. Departments throughout the hospital, are enthusiastic about the efficient, helpful service given by volunteers, some of whom come Sundays and holidays and without exception work cheerfully and efficiently.

These volunteers offer to the hospital a new channel of interpretation to the community. If they are carefully selected, patiently supervised and directed, and adequately oriented, they not only serve the hospital day by day, but they are friends and intelligent interpreters of the place of the Rhode Island Hospital in the life of the community.

BESS H. MEDARY, *Director Social Service*

RHODE ISLAND MEDICAL SOCIETY

Report of the Delegate to the American Medical Association

The report of the Delegate to the A.M.A. necessarily deals with the proceedings of the House of Delegates. The complete reports of the Bureaus, Councils and Committees presented to this body and the action taken cannot possibly be reviewed in a report of any reasonable length. I have these reports on file and shall be glad to send them to any member interested.

The set up of the House of Delegates is an example of well functioning democracy. The delegates are elected by the state societies, with one from each of the Government services and the scientific sections of the A.M.A. No other officer or person has a vote. The president, the other officers, and the trustees are members but without the right to vote. The delegates organize themselves, and elect their own speaker, who in turn appoints the reference committees. These reference committees report on the resolutions that are referred to them and thus all business receives careful consideration and unless the subject is one of unusual importance it takes very little time to settle it in the House of Delegates. Important subjects and those about which there is disagreement are freely debated and then settled by a vote.

In reporting the 1942 session of the House of Delegates I can only touch on a few subjects. Dr. Lahey spoke, again emphasizing the need for doctors in the armed forces. Later, he urged the medical societies to watch out for the medical care of industrial workers, as their health would be threatened by the shortage of physicians at home and by the great increase of population in some industrial centers.

Dr. West as Secretary reported that 120,701 or 66% of all the doctors in the country belong to their state societies and are therefore members of the A.M.A. Of these 70,206 pay dues and are Fellows of the A.M.A. In Rhode Island we had, according to Dr. West's figures, 961 doctors and 583 were members of the State Society. This gives us a membership of 60% which is slightly lower than the national average.

The Council of Industrial Health presented a long report which cannot be reviewed here. It is evident that the subject of industrial physicians, industrial medical departments and industrial health in general is one of the more important problems today.

The greater part of the time and effort of the officers and employees of the A.M.A. has been put into the war effort. Especially Dr. Leland and the Bureau of Medical Economics are constantly furnishing the U. S. Government with information about doctors and medical matters.

The Council on Medical Education and Hospitals provided a detailed description of the Essentials for an approved Internship.

The Medical Society of New Jersey introduced a resolution requesting that an adequate medical plan for medical care of the low income group be formulated by joint action between the government and the A.M.A. This resolution was not approved by the reference committee, which considered that plans should originate in local communities since these have separate and distinct problems and needs. This latter report was adopted by the House of Delegates.

A resolution was introduced approving the activities of the National Physicians' Committee for the Extension of Medical Service. The reference committee presented two reports, a majority report which expressed gratitude to all groups working to place medicine in a favorable light before the public and a minority report which specifically approved the activities of the National Physicians' Committee. A very spirited discussion followed after which the House of Delegates voted to adopt the minority report which gave the official approval of the A.M.A. to the activities of the National Physicians' Committee.

Dr. James E. Paullin of Atlanta, Georgia, was chosen President-elect without opposition. In his speech of acceptance Dr. Paullin spoke entirely of the responsibilities of the medical profession in supporting the war.

During the session it was obvious that the interest of the House of Delegates was centered on the war effort. The opposition to the approval of the activities of the National Physicians' Committee was based at least partly on the fear that such a resolution might affect the cordial relations between the A.M.A. and some members of the government and thus interfere with the conduct of the war. By invitation, Mr. Paul V. McNutt addressed the house. He spoke chiefly of the needs of the armed forces but also of the needs of many boom war towns and localities.

The experience of being a member of the House of Delegates was an exceedingly interesting one and I want to thank the R. I. Medical Society for this privilege.

Respectfully submitted,

WILLIAM P. BUFFUM, M.D., *Delegate.*

HOUSE OF DELEGATES

The regular meeting of the House of Delegates of the Rhode Island Medical Society was held at the Rhode Island Medical Society Library on Sept. 17, 1942 at 4:30 P. M., Dr. Charles F. Gormly, the President, presiding.

The minutes of the meeting of May 21st were read and approved.

The minutes of the Council meeting immediately preceding were read and approved.

The recommendation of the Council "That the Secretary extend to the members of the District Societies who are not members of the Rhode Island Medical Society and who are in the armed forces, the opportunity to join the Rhode Island Medical Society without paying dues during their service in the armed forces" was adopted.

The report of the Delegate to the American Medical Association was read and accepted.

The appointment of the following committees was announced by the President:

1. Committee on Problems Due to the Shortage of Physicians

Dr. Elihu S. Wing, Chairman
Dr. Charles J. Ashworth
Dr. Alfred L. Potter

2. Committee on Plans for an Executive Secretary

Dr. Alex M. Burgess, Chairman
Dr. John P. Jones
Dr. John F. Kenney
Dr. Emery M. Porter
Dr. William S. Streker

File your name with the Rhode Island Procurement and Assignment Committee if you will consider locating for civilian practice in one of two Rhode Island communities, now in need of additional medical personnel.

AN important function of the Rhode Island Procurement and Assignment Committee is to provide proper distribution of medical personnel throughout the State, to meet civilian needs during the war emergency.

Physicians who are ineligible for military service, women, young persons who may not yet have established a practice, and those above draft age, would seem to be the most available groups for such location or relocation as the case may be.

The two communities referred to offer excellent opportunity for general practice, both during the war emergency and for the post war period.

The Committee for Procurement and Assignment is acting in this matter under instructions from the Federal Government and in cooperation with the Rhode Island Medical Society, the State Health Authorities, and the medical personnel of the communities involved.

Patriotism, as well as self interest, we believe will bring a ready response to this call.

To file your name and for more detailed information communicate with the Chairman of the Rhode Island Procurement and Assignment Committee.

DR. HALSEY DEWOLF
305 Brook Street, Providence, Rhode Island
Tel. GAspee 5484

Dr. Roland Hammond reported for the Committee on Revision of the Rules and Bylaws. He reported progress but stated that important suggestions recently received from the American Medical Association required further study.

It was voted to allow this committee an extension of time in presenting its final report.

Dr. Wing read a report of the Committee on Problems Due to the Shortage of Physicians. This report was accepted.

It was moved that "A committee of three of the State Society, including Dr. E. A. McLaughlin as one of the members, be appointed to consider the question of yearly registration of physicians. An amendment to this motion was introduced that "The Secretary write to the Secretaries of the District Societies to get the opinion of these Societies on the question of annual registration of physicians". This amendment was not carried.

The original motion was then passed by the House of Delegates.

There were present Drs. Gormly, Mowry, A. M. Burgess, J. P. Jones, Mara, Dimmitt, Ashworth, Wing, Eddy, Abbate, Sage, Partridge, Brackett, Hammond, Rocheleau, Merle Potter, Webber, Honan, Waterman, A. L. Potter and Buffum.

The meeting adjourned at 6 P. M.

Respectfully submitted,

WM. P. BUFFUM, *Secretary*

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Medical Library on Monday, November 2, 1942. The meeting was called to order by President Henry E. Utter at 8:35 P. M.

The minutes of the previous meeting were read by the executive secretary, and following one correction in the listing of names of the discussants of the scientific presentation, was accepted and placed on file.

The executive secretary reported for the Executive Committee as follows:

"That at the October meeting of the Executive Committee it was recommended that the following matters be brought to the attention of the membership:

1. That the Executive Committee had voted that each member of the Association in service with the armed forces outside the continental United States

should be sent a carton of cigarettes as a Christmas greeting from the Association.

2. That the following recommendations of the Committee on Tuberculosis had been approved and are recommended to the membership of the Association for adoption:

'The Committee on Tuberculosis has approved the use of the facilities of the Providence Tuberculosis League for the making of a mass survey, sponsored by the Urban League, among the colored people of Greater Providence, with the understanding that referrals in individual cases where tuberculosis is detected shall be made to private physicians.

'The Committee on Tuberculosis supports the Providence Tuberculosis League in its ruling that patients referred to the League by private physicians who afterwards leave the community for military service may have one additional checkup by the League, but cannot return again unless referred by a doctor resident in the State to whom a report will be sent by the League.' "

A motion was made, seconded and passed that the report of the Executive Committee, including the recommendations of the Committee on Tuberculosis, be accepted and approved.

The President announced that he had appointed Drs. Charles Cook and Marcius H. Merchant as a committee to prepare the Association's tribute to the late Dr. Henry W. Hopkins, and he also had appointed Drs. Harrison F. Hyer and Robert H. Whitmarsh to prepare the tribute to the late Dr. Preston D. Geiger.

The executive secretary reported that the Executive Committee had recommended for active membership in the Association Dr. Joseph DeLuca. On the motion of Dr. Jesse Mowry the election of Dr. DeLuca to active membership was made unanimous.

The President introduced Dr. Lyman Richards, a member of the department of otolaryngology at Harvard Medical School, and attending physician at Children's Hospital in Boston, who spoke on "The Tonsil Question—A Periscopic Viewpoint."

The scientific portion of the evening was devoted to a discussion of the Tonsil Problem. Dr. Lyman Richards of the Harvard Medical School was the principal speaker. He said that the function of the tonsils was still not known and that there was some difference of opinion as to the indications for removal. He felt that repeated attacks of fallicular tonsillitis, chronic persistent enlargement of the subtonsillar cervical glands, and peritonsillar abscess were definite indications for operation. Rheumatic fever, arthritis, bursitis, pyelitis, etc., are not as clear. The operation should not be termed "minor" and, although the technique varies much with different operators, general surgeons and general practitioners should learn how to do it properly, before attempting it. He spoke against avertin anesthesia, diathermy and X-Ray and said that sealed-in remnants were more of a menace than the original tonsils. He questioned whether the adenoid should always be removed with the tonsil. The complications of the operation were considered, and chemotherapy before operation was suggested as likely to become popular.

Dr. Maurice Adelman discussed the subject from the pediatric viewpoint. He said that the indications for operation must include the knowledge of the patient's condition over the preceding years that only the pediatrician or general practitioner could have. He said that the age of the patient and the season of the year were not important.

Dr. Francis Sargent was the next speaker. He brought out the part that allergy played in the problem. Tonsils and especially adenoids were said to be very apt to recur in the allergic patient. The operation was likely to be advised when the obstruction was entirely intranasal and could not be relieved by a throat operation. He stated, however, that if infection was present, especially in the tonsils, operation is indicated in spite of allergy.

The next speaker was Dr. Frank M. Adams who commented on the lymphoid hyperplasia occurring after operation. 8% of all cases showed recurrence regardless of the operation. There is always lymphoid tissue in the throat which in some cases grows, perhaps to compensate for the removal of large masses.

Dr. Alex M. Burgess talked from the standpoint of the internist. He said that in any chronic or repeated infection, the tonsil is always under suspicion. In coronary occlusion, it may be of etiological importance. Certainly in recurrent iritis the relationship is definite.

Dr. Nathan Bolotow spoke of the importance of clamping and tying all arteries and of the importance of a light anesthesia.

Drs. John Langdon, Banice Feinberg, John Gilbert, Anthony Corvese and Amy Russell joined in the open discussion.

RECENT BOOKS

SYNOPSIS OF PATHOLOGY—W. A. D. Anderson. The C. V. Mosby Co., 1942.

In the preface to the book the author states this "volume is intended to fill the gap which has existed between the very elementary manuals of pathology and the abundant excellent longer textbooks and reference works. By the presentation of pathology in a compact and condensed form, it is designed to be useful to the medical student, to the dental student studying general pathology, and to the clinician who must maintain familiarity with the foundation sciences of the medical profession."

Since modern pathology is based upon anatomy, histology, embryology, physiology, biochemistry, and bacteriology and forms the essential link between these sciences and clinical medicine, rapid advancement in the foundation sciences is bringing about an ever increasing complexity in which the mass of details, however interesting and important, tends to obscure the broad outlines and patterns of disease processes with the main features of which every physician should be familiar.

The text appears to be thoroughly up-to-date and contains a high percentage of references to the literature published within the past two years and a considerable number to publications during the present year.

In its 638 pages the book contains over 300 photographs, photo-micrographs and colored plates, the excellence of which would do credit to a much more pretentious volume.

The reviewer believes that a cursory browsing through the book will be sufficient to show that the author has succeeded admirably in fulfilling his stated purpose.

LESTER A. ROUND, Ph.D.

A TEXT BOOK OF GYNECOLOGY by Arthur Hale Curtis, M.D. Fourth Edition. W. B. Saunders Co.

In this edition of Dr. Curtis' book there have been many changes chiefly in the new developments in the use of sulfa drugs and in the section on ovarian tumors.

The book is as always an excellent text book. I was very favorably impressed with the common sense view with which the author discusses endocrines and the use of endocrine products in therapy.

The chapter on menstruation is entirely up to date. We should all agree with the author's recommendation of expectant treatment in post-abortal infection.

The section on ovarian tumors as mentioned above has been entirely rewritten, a good classification is given, and there are many good illustrations.

The illustrations depicting various operations for prolapse are also excellent.

The final chapter on operative management and post-operative care is well worth reading.

CRAIG S. HOUSTON, M.D.

THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA. Twelfth Revision. Mack Printing Company, Easton, Pa.

The twelfth revision of the United States Pharmacopoeia, containing 160 new drugs and medicinal preparations, is the best and most useful edition we have had and shows the work and cooperation of well known authorities in medicine, pharmacy and health science.

Many of these preparations have been in use for some time by the medical profession and are now brought under official standards.

The committees on revision are to be commended on this twelfth edition of the U S P.

WILBUR E. JOHNSTON, PHAR.D.

THE MODERN ATTACK ON TUBERCULOSIS, by Henry D. Chadwick, M.D. and Alton S. Pope, M.D. 99 pages. $1.00. The Commonwealth Fund.

Here is a small package full of choice morsels. The authors have presented the subject of tuberculosis in all its ramifications from A to Z without waste or confusion. Superlatives have been tossed aside to present facts: and the old and the new are treated in a manner that should be satisfactory to all.

The possibility of the complete eradication of tuberculosis in a reasonable time is the motivating thought throughout the book. Facts and figures to substantiate such an aim are valuable and convincing. How we arrived at our present respectable low mortality and morbidity rates; and how we may be able to attain the ultimate goal are explained and proposed as only those having thorough knowledge and experience are able to do it.

Here is a book that will answer many of the questions and problems which confront the physician when he thinks of tuberculosis. It is invaluable to all public health-minded individuals and groups, whether they be lay or professional. It is easy to read. It is itself a review of all that is important to know of the disease from a public health aspect.

PETER F. HARRINGTON, M.D.

INFLUENCE OF 'SODIUM AMYTAL' ON INTELLIGENCE

During air raids on London various sedatives were tried on anxious patients, not only therapeutically, but prophylactically to reduce apprehension and induce a state of relative mental calm. In order to determine the degree of mental impairment and the capacity to react reasonably to an emergency, Slater et al (Lancet, *1*:676, June 6, 1942) measured the effect of 'Sodium Amytal' (Sodium Iso-amyl Ethyl Barbiturate, Lilly) by means of standard intelligence tests which were performed on nearly 400 cases. It was concluded that doses of 3 grains or less did not impair the functioning of the patients' intelligence to any important extent. The drug must be prescribed, nevertheless, with individual susceptibilities and requirements in mind. Doses of 1 grain to 3 grains were most generally useful.